

Notice of Allowability

Application No.

10/621,046

Examiner

Chandra Chaudhari

Applicant(s)

GRIGOROPOULOS ET AL.

Art Unit

2891

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed January 6, 2006.
2. ☒ The allowed claim(s) is/are 1-25 and 35-39.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with George Wolken on March 3, 2006.

The application has been amended as follows:

Claims 30-34 have already been cancelled in the amendment/response filed April 18, 2005, and claims 26-29 have been cancelled in the amendment filed on January 6, 2006.

Delete claim 38 from the amendment filed January 6, 2006 , and insert new claim 38 as:

--A method for making a capacitor comprising:

a) depositing a first electrically conductive structure on an insulating substrate comprising the steps of;

a1) depositing drops of a first suspension onto said insulating substrate,

wherein said first suspension comprises nanoparticles of a material suspended in a liquid; and,

wherein said insulating substrate lacks recesses in the region where said drops are deposited onto said insulating substrate; and,

a2) exposing said nanoparticles on said insulating substrate to at least one localized spot of laser light such that said nanoparticles are at least partially melted by said at least one localized spot of laser light; and,

a3) solidifying said at least partially melted nanoparticles, forming thereby said first electrically conductive structure on said insulating substrate; and,

b) depositing a dielectric structure on said first electrically conductive structure, comprising the steps of;

b1) depositing drops of a polymerizable liquid on said first electrically conductive structure; and,

b2) polymerizing said drops of said polymerizable liquid, forming thereby a dielectric structure on said first electrically conductive structure; and,

c) depositing a second electrically conductive structure on said dielectric structure, comprising the steps of;

c1) depositing drops of a second suspension onto said dielectric structure,
wherein said second suspension comprises nanoparticles of a material suspended in a liquid; and,

c2) exposing said nanoparticles on said dielectric structure to at least one localized spot of laser light such that said nanoparticles are at least partially melted by said at least one localized spot of laser light; and,

c3) solidifying said at least partially melted nanoparticles, forming thereby said second electrically conductive structure on said dielectric structure; such that said first electrically conductive structure and said second electrically conductive structure surround said dielectric structure forming thereby a capacitor.--

Delete claim 39 from the amendment filed January 6, 2006, and insert new claim 39 as:

--A method for crossing a first electrical conductor and a second electrical conductor on an insulating substrate while maintaining electrical isolation between said first and second electrical conductors, comprising:

a) depositing a first electrically conductive structure on an insulating substrate comprising the steps of;

a1) depositing drops of a first suspension onto said insulating substrate,
wherein said first suspension comprises nanoparticles of a material suspended in a liquid; and, wherein said insulating substrate lacks recesses in the region where said drops are deposited onto said insulating substrate; and,

a2) exposing said nanoparticles on said insulating substrate to at least one localized spot of laser light such that said nanoparticles are at least partially melted by said at least one localized spot of laser light; and,

a3) solidifying said at least partially melted nanoparticles, forming thereby said first electrically conductive structure on said insulating substrate; and,

b) depositing an insulating structure on said first electrically conductive structure, comprising the steps of;

b1) depositing drops of a polymerizable liquid on said first electrically conductive structure; and,

b2) polymerizing said drops of said polymerizable liquid, forming thereby an insulating structure on said first electrically conductive structure; and,

c) depositing a second electrically conductive structure on said insulating structure, comprising the steps of,

c1) depositing drops of a second suspension onto said insulating structure, wherein said second suspension comprises nanoparticles of a material suspended in a liquid; and,

c2) exposing said nanoparticles on said insulating structure to at least one localized spot of laser light such that said nanoparticles are at least partially melted by said at least one localized spot of laser light; and,


c3) solidifying said at least partially melted nanoparticles, forming thereby said second electrically conductive structure on said insulating structure; such that said first electrically conductive structure and said second electrically conductive structure are separated by said insulating structure and maintain electrical isolation thereby.--

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandra Chaudhari whose telephone number is 571-272-1688. The examiner can normally be reached on Mon - Fri (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Baumeister can be reached on 571-272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Chandra Chaudhari
March 13, 2006

Chandra Chaudhari
Primary Examiner
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